

As of 5-6-64 this well was converted to a Water Injection Well

FILE NOTATIONS

Entered in NID File ☒
Entered On S R Sheet ☒
Location Map Pinned ☒
Card indexed ☒
I W R for State or Fee Land ☐

Checked by Chief R. L. L.
Copy NID to Field Office ☒
Approval Letter ☒
Disapproval Letter ☐

COMPLETION DATA:

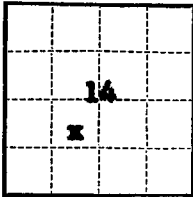
Date Well Completed 2-1-61
OW ☒ WW ☐ TA ☐
GW ☐ OS ☐ PA ☐

Location Inspected ☐
Bond released ☐
State of Fee Land ☐

LOGS FILED

Driller's Log 3-24-61
Electric Logs (No.) 2

E ☒ I ☒ E-I ☐ GR ☐ GR-N ☒ Micro ☐
Lat ☐ Mi-L ☐ Sonic ☐ Others ☐



(SUBMIT IN TRIPLICATE)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency
Window Rock
Allottee Navajo
Lease No. 14-20-603-370

SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|--|-------------------------------------|---|--|
| NOTICE OF INTENTION TO DRILL..... | <input checked="" type="checkbox"/> | SUBSEQUENT REPORT OF WATER SHUT-OFF..... | |
| NOTICE OF INTENTION TO CHANGE PLANS..... | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING..... | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF..... | | SUBSEQUENT REPORT OF ALTERING CASING..... | |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL..... | | SUBSEQUENT REPORT OF REDRILLING OR REPAIR..... | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE..... | | SUBSEQUENT REPORT OF ABANDONMENT..... | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING..... | | SUPPLEMENTARY WELL HISTORY..... | |
| NOTICE OF INTENTION TO ABANDON WELL..... | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

..... December 13, 1960.....

Navajo 'E'
Well No. 23-14 is located 2054 ft. from N line and 2020 ft. from W line of sec. 14

NE SW Sec. 14 418 24E SLBAM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
White Mesa San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4697 ft. ungraded ground

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Propose to drill well to test Paradox Formation at depth of approximately 5660'.

Will set approximately 600' of 8-5/8" surface pipe in 11" hole with cement circulated to surface.

Will set 4-1/2" casing through any commercial production encountered.
4-1/2" casing will be cemented with 250 sacks.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company The Superior Oil Company

Address P. O. Drawer 'G'

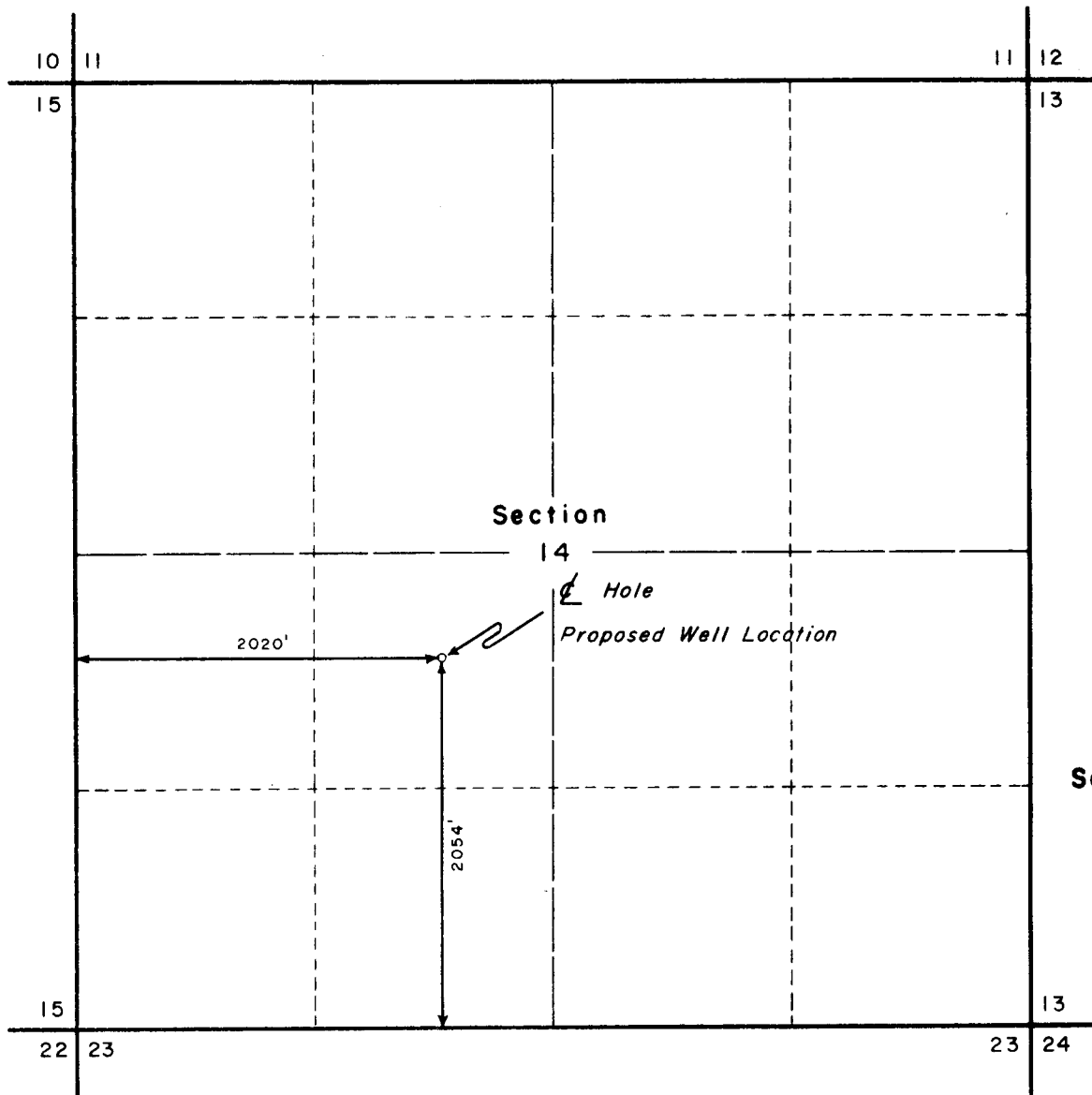
Cortez, Colorado

ORIGINAL SIGNED BY
D. D. KINGMAN

By D.D. Kingman

Title Engineer

CERTIFICATE OF SURVEY



WELL LOCATION: THE SUPERIOR OIL CO. No. 23-14 (NAVAJO "E")

Located 2020 feet East of the West line and 2054 feet North of the South line of Section 14
Township 41 South Range 24 East Salt Lake Meridian
San Juan County, Utah
Existing ground elevation determined at 4697 feet based on U.S.G.S. datum.

I hereby certify the above plat represents a survey made under my supervision and is accurate to the best of my knowledge and belief.

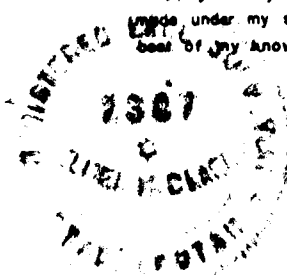
E. Mer M. Clark

E. MER M. CLARK
Registered Land Surveyor
State of Utah (No. 2307)

Revised

E.M. CLARK & ASSOCIATES
Durango, Colorado

July 27, 1960



| | | | |
|---|----|--|--|
| | | | |
| | | | |
| | 14 | | |
| X | | | |
| | | | |

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency _____
Window Rock
Allottee Navajo
Lease No. 14-20-603-370

SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|---|---|--|--|
| NOTICE OF INTENTION TO DRILL | X | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
| NOTICE OF INTENTION TO CHANGE PLANS | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF | | SUBSEQUENT REPORT OF ALTERING CASING | |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL | | SUBSEQUENT REPORT OF REDRILLING OR REPAIR | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE | | SUBSEQUENT REPORT OF ABANDONMENT | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL | | | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 13, 1960

Navajo 'E'
Well No. 23-14 is located 2054 ft. from ~~SW~~_S line and 2020 ft. from ~~SE~~_W line of sec. 14

NE SW Sec. 14 (1/4 Sec. and Sec. No.) 41S (Twp.) 24E (Range) SLB&M (Meridian)
White Mesa (Field) San Juan (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4697 ft. ungraded ground

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Propose to drill well to test Paradox Formation at depth of approximately 5660'.

Will set approximately 600' of 8-5/8" surface pipe in 11" hole with cement circulated to surface.

Will set 4-1/2" casing through any commercial production encountered.
4-1/2" casing will be cemented with 250 sacks.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

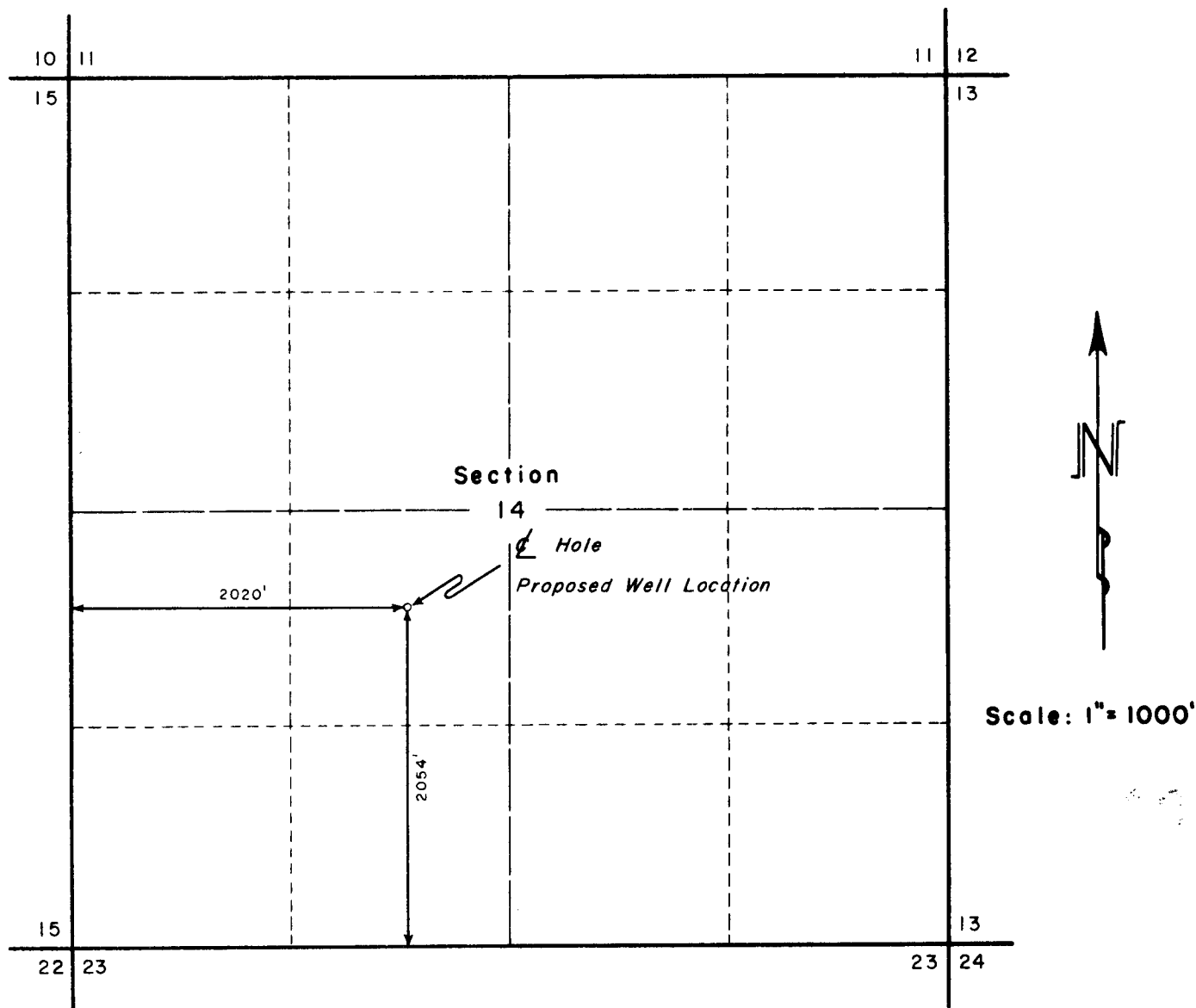
Company The Superior Oil Company

Address P. O. Drawer 'G'

Cortez, Colorado

By *D. D. Kingman*
D.D. Kingman
Title Engineer

CERTIFICATE OF SURVEY



WELL LOCATION: THE SUPERIOR OIL CO. No. 23-14 (NAVAJO "E")

Located 2020 feet East of the West line and 2054 feet North of the South line of Section 14
Township 41 South Range 24 East Salt Lake Meridian
San Juan County, Utah
Existing ground elevation determined at 4697 feet based on U.S.G.S. datum.

I hereby certify the above plat represents a survey made under my supervision and is accurate to the best of my knowledge and belief.

Edmer M. Clark
E. MER. M. CLARK
Registered Land Surveyor
State of Utah (No. 2307)

Revised
E.M. CLARK & ASSOCIATES
Durango, Colorado
July 27, 1960

December 16, 1960

The Superior Oil Company
P. O. Drawer 'G'
Cortez, Colorado

Attention: D. D. Kingman, Eng.

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Navajo 'E' 23-14, which is to be located 2054 feet from the south line and 2020 feet from the west line of Section 14, Township 41 South, Range 24 East, SLB#1, San Juan County, Utah.

Please be advised that insofar as this office is concerned approval to drill said well is hereby granted.

This approval terminates within 90 days if the above mentioned well has not been spudded in within said period.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FREIGHT,
EXECUTIVE SECRETARY

CBF:awg

cc: P. T. McGrath, Dist. Eng.
U. S. Geological Survey

H. L. Counts, OGCC, Moab

Santa Fe

U. S. LAND OFFICE

SERIAL NUMBER 14-20-603-370

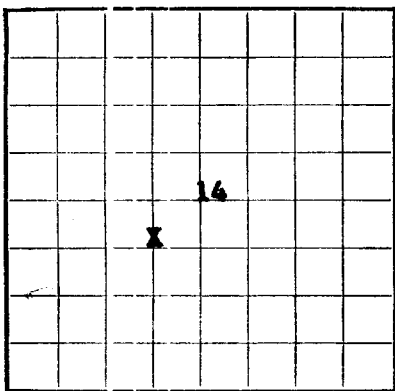
LEASE OR PERMIT TO PROSPECT

Navajo

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company The Superior Oil Company Address P.O. Drawer G, Cortez, Colorado
 Lessor or Tract Navajo 'E' Field White Mesa State Utah
 Well No 23-14 Sec. 14 T. 41S R. 24E Meridian SLEM County San Juan
 Location 2054 ft. N of S Line and 2020 ft. E of W Line of section 14 Elevation 4705 KB
 (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

ORIGINAL SIGNED BY
 Signed W.M. Ransburg Title Engineer
 Date March 23, 1961

The summary on this page is for the condition of the well at above date.

Commenced drilling December 22, 19 60 Finished drilling February 1, 19 61

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5375 to 5533 No. 4, from _____ to _____
 No. 2, from 5545 to 5713 No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

| Size casing | Weight per foot | Threads per inch | Make | Amount | Kind of shoe | Cut and pulled from | Perforated | | Purpose |
|-------------|-----------------|------------------|-----------------|--------|--------------|---------------------|------------|------|------------|
| | | | | | | | From— | To— | |
| 9-5/8" | 25.4 | 32 | 30# S1.Jc. H-40 | 79' | Float | None | None | | Conductor |
| 7" | 21.8 | 24 | 1-55 | 1490' | | | | | Surface |
| 4 1/2" | 17.5 | 24 | 1-55 | 5713' | | | 5533 | 5713 | Production |

MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|-------------------------------|-------------|--------------------|
| 9-5/8" | 79' | 60 | Cement circulated to surface. | | |
| 7" | 1490' | 600 | Cement circulated to surface. | | |
| 4 1/2" | 5713' | 250 | Pump and plug. | | |

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
 Adapters—Material _____ Size _____

SHOOTING RECORD

| Casing size | Where set | Number sacks of cement | Method used |
|-------------|-----------|------------------------|-------------------------------|
| 9-5/8" | 79' | 60 | Cement circulated to surface. |
| 7" | 1490' | 600 | Cement circulated to surface. |
| 4 1/2" | 5713' | 250 | Pump and plug. |

[illegible]

| Size | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleaned out |
|------|------------|----------------|----------|------|------------|-------------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

Rock pressure, lbs. per sq. in. _____

_____, Driller

[illegible]

MAR 24 1961

[OVER]

FORMATION RECORD—Continued

A-48794-4

(SUBMIT IN TRIPLICATE)

Indian Agency _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Window Rock

Allottee Navajo

Lease No. 14-20-603-370

| | | |
|---|----|--|
| | | |
| | 14 | |
| X | | |
| | | |

SUNDRY NOTICES AND REPORTS ON WELLS

| | |
|--|---|
| NOTICE OF INTENTION TO DRILL..... | SUBSEQUENT REPORT OF WATER SHUT-OFF..... |
| NOTICE OF INTENTION TO CHANGE PLANS..... | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING..... |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF..... | SUBSEQUENT REPORT OF ALTERING CASING..... |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL..... | SUBSEQUENT REPORT OF REDRILLING OR REPAIR..... |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE..... | SUBSEQUENT REPORT OF ABANDONMENT..... |
| NOTICE OF INTENTION TO PULL OR ALTER CASING..... | SUPPLEMENTARY WELL HISTORY..... |
| NOTICE OF INTENTION TO ABANDON WELL..... | |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

March 23, 1961

Navajo 'E'
Well No. #23-14 is located 2054 ft. from ~~XXX~~ [S] line and 2020 ft. from ~~XXX~~ [W] line of sec. 14

NE SW Sec. 14 41S 24E 91.6M
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
White Mesa San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~surface~~ floor above sea level is 4705 ft. K.B.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spudded: December 22, 1960

Completed: February 1, 1961

T.D: 5713' P.B.T.D: 5670'

Casing: 9-5/8" 25.4# & 32.30# Set at 79' w/60 sacks.
7" 23# Set at 1490' w/600 sacks.
4-1/2" 9.50# Set at 5713' w/250 sacks.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company The Superior Oil Company

Address P. O. Drawer 'G'

Cortez, Colorado

ORIGINAL SIGNED BY

By W. H. Hamburg

Title Engineer

WHR/njh

ELECTRIC LOG DATA

| | |
|--------------|--------------|
| Hermosa | 4531' |
| Ismay | 5375' |
| Gothic Shale | 5533' |
| Desert Creek | 5545' (-845) |
| Chimney Rock | 5690' |

PERFORATIONS

5534'-5546' w/3 Torpedo Jets/7ft.

DRILL STRING TOOLS None**TREATMENTS**

1-31-61 Acid Job #1 (Perfs. 5534'-66')

200 gals. HDA, followed by 3,000 gals. Regular Acid. Max.
Press. 4200#/2000#.

TUBING:

| | |
|--|-------|
| 2" 4.70# J-55, R-2, 82d Spang w/1" x 39' Gas Anchor | 5599' |
| Seating Nipple | 5557' |
| Baker Compensator | 5522' |
| Bottom jt. bull plugged, 10' perf'd. ^{pup} 1' ft. off bottom. | |

INITIAL PRODUCTION

3-1-61 Well pumped 14 bbls. fluid in 24 hrs.
Gty. 42.0°, Press. 180/60 cut 0.4%
P/15-44"

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN T.
(Other instruct.
verse side)DATE
ON re-Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

| | | |
|--|--|---|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> | | 5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-370 |
| 2. NAME OF OPERATOR Phillips Petroleum Company | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal |
| 3. ADDRESS OF OPERATOR P.O. Box 1150, Cortez, Colorado | | 7. UNIT AGREEMENT NAME |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NE, SW Sec. 14 2054 FWL; 2020' FWL Sec. 14 | | 8. FARM OR LEASE NAME Rutherford Unit |
| 14. PERMIT NO. | | 9. WELL NO. E-14-23 |
| 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4705 KB | | 10. FIELD AND POOL, OR WILDCAT Greater Anath Field |
| | | 11. SEC. T., R., M., OR BLM. AND SURVEY OR AREA Sec. 14-413-24B BLM |
| | | 12. COUNTY OR PARISH San Juan |
| | | 13. STATE Utah |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pull rods and tubing, jet perforate Desert Creek zone from 5618-24' with 4 holes/ft. Acidize Desert Creek perforations 5554-66 and 5618-24 with 2000 gallons regular Acid, 200 gallons Sol-Block and 2000 gallons regular acid. Test for Water Injection. If satisfactory injection run Marlex lined tubing and convert to water injection well. If test unsatisfactory return well to producing status. T.O. 5670

Present Production: 2/6/64 4 BO, 40 MCFG, 0 Wtr 24 hrs. pumping.

18. I hereby certify that the foregoing is true and correct

SIGNED

By C. M. Sales
Frank R. Davis

TITLE

Area Supt.

DATE

2/26/64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IT
(Other ins
verse side)ICATE*
on re-Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

| | | | |
|--|--|--|--|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> | | 5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-370 | |
| 2. NAME OF OPERATOR Phillips Petroleum Company | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal | |
| 3. ADDRESS OF OPERATOR P. O. Drawer 1150, Cortez, Colorado | | 7. UNIT AGREEMENT NAME | |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NE, SW Sec. 14 2054 FSL; 2020' FSL Sec. 14 | | 8. FARM OR LEASE NAME Rutherford Unit | |
| 14. PERMIT NO. | | 9. WELL NO. EL4-23 | |
| 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4705 KB | | 10. FIELD AND POOL, OR WILDCAT Greater Aneth Field | |
| | | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 14-41S-24E S1E4 | |
| | | 12. COUNTY OR PARISH San Juan | |
| | | 13. STATE Utah | |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

Perf. 6' Desert Creek, acidize & test for w.i.,
(Other) ~~convert to production~~
(Note: Report results of production completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

3-8-64 Perforated Desert Creek 5618-24' w/4 shots per foot. Ran 2" tubing and packer. Acidized perforations 5554-66 and 5618-24' with 2000 gallons regular acid, 200 gallons Block, and 2000 gallons regular acid. Tested well for Water Injection receptivity. Pulled tubing with packer, packer set at 1025', sheared packer. Fished all parts except one 1"x4" slip and 5 approximately 1"x1/2" long slip springs left in hole. Ran tubing and rods, hung well on, started pumping from Desert Creek perforations 5554-66' and 5618-24' in Greater Aneth-Paradox Formation.

Production - Previous: 4 BO, 40 MCF Gas, 0 Water 24 hrs.

Present Production: 9 BOPD, 10 BWPD, 0 WMPD (Will convert to Water Injection in approximately one month - will advise of conversion).

* Pumped water into formation 3 BPM at 0# to 2700# in 15 minutes

2 BPM at 2425# to 2700# in 12 min. pressure increasing

1 BPM at 2500# - decreased to 2200# in 10 minutes

1/2 BPM at 2000# - decreased to 1625# in 10 minutes

Shut Down Pressure 1450#

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE C. M. Boles, Area Supt.

DATE

3-20-64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



PHILLIPS PETROLEUM COMPANY
P. O. Drawer 1150
Cortez, Colorado

May 11, 1964

Utah Oil & Gas Conservation Commission
310 Newhouse Building
Salt Lake City 11, Utah

Attention: Mr. Cleon B. Feight

Dear Sirs:

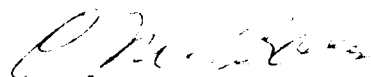
In accordance with Rule E-4 of the Utah General Rules and Regulations, we wish to advise that the following wells located on the Ratherford Unit in San Juan County, Utah, were converted to water injection wells.

| Old Well No. | New Well No. | Date Converted | Injection Rate | Injection Pressure |
|-----------------|-----------------|-------------------|-------------------|-----------------------|
| E14-23 | E14W23 | 5-6-64 | 158 BWPD | 2600# |
| 4-23 | 4W23 | 5-9-64 | 230 BWPD | 2600# |

Details of the above conversions will be furnished on USGS Form No. 9-331b in the near future.

Very truly yours,

PHILLIPS PETROLEUM COMPANY


C. M. Boles
District Superintendent

bh

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IT
(Other ins
verse side)

DATE
OR re

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-370

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

sup 1-1192
Hillbarn Unit

9. WELL NO.

E14223

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

14-118-24E S14E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

1.

OIL
WELL ☐

GAS
WELL ☐

OTHER

Water Injection Well

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

P. O. Drawer 1150, Cortez, Colorado

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*

See also space 17 below.)
At surface

NE, SW Sec. 14 2054 FSL; 2020' FWL Sec. 14

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4705 KB

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other)

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐ Convert to Water Injection Well
(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pulled rods and tubing. Ran 2" tubing with Marlex Liner and Baker Tension Packer. Hooked well up for Water Injection, started injecting water 5-6-64. Changed well classification from oil well to water injection well and number from E14-23 to E14-23 effective 5-6-64.

Previous Production from Greater Aneth - Paradox Formation, Desert Creek Zone: 4 BOPD, 9 MCFGPD, 0 water.

Present Injection Rate: Injected 158 BOPD at 2600#.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. Boles
C. M. Boles

TITLE Area Superintendent

DATE

6-19-64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN THE
(Other instruct.
reverse side)DATE
on re-Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-403-370

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

S-1-4193
Ranchford Unit

9. WELL NO.

14-23

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC. T. R. OR BLK. AND
SURVEY OR AREA

14-419-24E S1E1

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

| | |
|--|--|
| 1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection Well | 7. UNIT AGREEMENT NAME |
| 2. NAME OF OPERATOR Phillips Petroleum Company | 8. FARM OR LEASE NAME S-1-4193 Ranchford Unit |
| 3. ADDRESS OF OPERATOR P. O. Drawer 1150, Cortez, Colorado | 9. WELL NO. 14-23 |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface NE, SW Sec. 14 2054 FSL; 2020' FWL Sec. 14 | 10. FIELD AND POOL, OR WILDCAT Greater Aneth |
| 14. PERMIT NO. | 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4705 KB |
| 12. COUNTY OR PARISH San Juan | 13. STATE Utah |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☒ **Convert to water injection well**
(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pulled rods and tubing. Ran 2" tubing with Marlex liner and Baker Tension Packer. Hooked well up for water injection, started injecting water 5-6-64. Changed well classification from oil well to water injection well and number from 14-23 to 14-23 effective 5-6-64.

Previous Production from Greater Aneth - Paradox Formation, Desert Creek Zone: 4 BOPD, 9 MCFOPD, 0 water.

Present Injection Rate: Injected 156 BOPD at 2600#.

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. HalesTITLE Area SuperintendentDATE 6-19-64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TR. DATE*
(Other instruction on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-370

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

SW-1-4192

8. FARM OR LEASE NAME

Rotherford Unit

9. WELL NO.

21423

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., M., OR B.L.E. AND
SURVEY OR AREA

14-413-S.E. S.L.S.M.

12. COUNTY OR PARISH

Salt Lake

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER ☒ Water Injection

2. NAME OF OPERATOR

Phillips Petroleum Co.

3. ADDRESS OF OPERATOR

P. O. Drawer 1150, Cortez, Colorado 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

2034' FSL; 2020' FSL Section 14
NE, SW Sec. 14

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4705 KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☒

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Acidize with 2000 gallons 28% acid and return to injection.

Present injection rate: 6 MFPD at 2260'

18. I hereby certify that the foregoing is true and correct

SIGNED

C. M. Hales

TITLE

Dist. Supt.

DATE

12-6-66

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN THE CATEGORY
(Other instructions on reverse side)Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

| | | |
|--|--|--|
| 1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection | | 5. LEASE DESIGNATION AND SERIAL NO. 11-25-205-370 |
| 2. NAME OF OPERATOR Phillips Petroleum Co. | | 6. INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribe |
| 3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321 | | 7. UNIT AGREEMENT NAME W-1-1192 |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2054' FSL; 2020' FSL Section 14 NE, SW Sec. 14 | | 8. FARM OR LEASE NAME Robertson Unit |
| 14. PERMIT NO. | | 9. WELL NO. 1140 |
| 15. ELEVATION (Show whether DF, RT, GR, etc.) 4705' IS | | 10. FIELD AND POOL, OR WILDCAT Greater Aneth |
| | | 11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA 14-11S-20E S. 14 S.B.M. |
| | | 12. COUNTY OF PARISH San Juan |
| | | 13. STATE Utah |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☒SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On Dec. 19, 1966 moved in well service unit, pulled tubing and Marlex liner, reran base tubing and packer. Ran wireline, tubing was plugged at 5440'. Pulled tubing, ran bit, cleaned out from 5626 to 5670'. Pulled bit, ran tubing and packer. Acidized Desert Creek with 5000 gallons 28% acid in 2 equal stages with 500 gallons salt block between stages. Resumed injection.

PREVIOUS INJECTION RATE: 6 BWPD at 2260#.

PRESENT INJECTION RATE: 560 BWPD at 2400#.

18. I hereby certify that the foregoing is true and correct

Dist. Sept.

1-22-67

SIGNED **G. N. Boles**

TITLE

DATE

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING
ROOM 4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
(801) 533-5771
(RULE I-5 & RULE I-4)

FORM NO. DOGM-UIC-1
(Revised 1982)

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY

CAUSE NO. C-3(B)

ADDRESS P.O. BOX 2920
CASPER, WYOMING ZIP 82602
INDIVIDUAL PARTNERSHIP ☒ CORPORATION
FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR
INJECT FLUID INTO THE E14W23 WELL
SEC. 14 TWP. 41S RANGE 24E
SAN JUAN COUNTY, UTAH

ENHANCED RECOVERY INJ. WELL ☒
DISPOSAL WELL ☐
LP GAS STORAGE ☐
EXISTING WELL (RULE I-4) ☒

APPLICATION

Comes now the applicant and shows the Corporation Commission the following:

1. That Rule I-5 (g) (iv) authorizes administrative approval of enhanced recovery injections, disposal or LP Gas storage operations.
2. That the applicant submits the following information.

| | | | |
|--|--|--|-------------------------|
| Lease Name Ratherford Unit | Well No. E14W23 | Field Greater Aneth | County San Juan |
| Location of Enhanced Recovery Injection or Disposal Well E14W23 Sec. 14 Twp. 41S Rge. 24E | | | |
| New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Old Well To Be Converted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date 5-23 | |
| Depth-Base Lowest Known Wingate Fresh Water Within 1/2 Mile 1550' | Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | | State What Oil & Gas |
| Location of Injection Source(s) Desert Creek Paradox I & II San Juan River | Geologic Name(s) Desert Creek (5567') and Depth of Source(s) San Juan River (Surface) | | |
| Geologic Name of Injection Zone Desert Creek I & II | Depth of Injection Interval 5554 to 5624 | | |
| a. Top of the Perforated Interval: 5554 | b. Base of Fresh Water: 1550' | c. Intervening Thickness (a minus b) 4004 | |
| Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES NO See Attachment #4 | | | |
| Lithology of Intervening Zones See Attachment #1 | | | |
| Injection Rates and Pressures SD 1226-80 Maximum B/D PSI | | | |
| The Names and Addresses of Those to Whom Notice of Application Should be Sent. | | | |
| Navajo Tribe, Minerals Dept., P.O. Box 146, Window Rock, AZ 86515 | | | |
| Superior Oil, P.O. Box 4530, The Woodlands, TX 77380 | | | |
| Texaco Inc., P.O. Box 2100, Denver, CO 80201 | | | |
| Southland Royalty, 1000 Fort Worth Club Tower, Fort Worth, TX 76102 | | | |

State of Wyoming)

PHILLIPS PETROLEUM COMPANY

Applicant

County of Natrona)

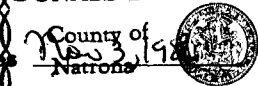
Before me, the undersigned authority, on this day personally appeared A. E. Stuart
known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on
oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated
therein, and that said report is true and correct.

Suscribed and sworn to before me this 21st day of Sept, 19 83

SEAL

DONALD L. HUDSON - Notary Public

My commission expires



Notary Public in and for Natrona Co., Wyoming

My Commission Expires Nov. 3, 1986 (OVER)

1. Attach qualitative and quantitative analysis of representative sample of water to be injected and a qualitative and quantitative analysis of the injection formation of water.
2. Attach plot showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within one-half mile, together and with the name of the operator(s).
3. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division or appropriate government agencies.)
4. Attach Electric or Radioactivity Log of Subject well (if released).
5. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval.
6. If the application is for a NEW well the original and six (6) copies of the application and three (3) complete sets of attachments shall be mailed to the Division. For EXISTING well applications (Rule I-4) only ONE copy of the application and ONE complete set of attachments are required to be mailed to the Division.
7. The Division is required to send notice of application to the surface owner of the land within one-half mile of the injection well and to each operator of a producing leasehold within one-half mile of the injection well. List all required names and addresses in the appropriate space provided on the front of this form.
8. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county of publication before the application is approved. The notice shall include the name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application may be approved administratively.
9. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed by January 31st each year.
10. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
11. If there is less intervening thickness required by Rule I-5 (b) 4, attach sworn evidence and data.
12. For enhanced recovery projects, information required by Rule I-4 which is common to more than one well, need be reported only once on the application.

CASING AND TUBING DATA

| NAME OF STRING | SIZE | SETTING DEPTH | SACKS CEMENT | TOP OF CEMENT | TOP DETERMINED BY |
|----------------|---------------------------|---------------|--|---------------|-------------------------------|
| Surface | 9 5/8 | 79 | 60 | Surface | Returns |
| Intermediate | 7 | 1490 | 600 | Surface | Returns |
| Production | 4 1/2 | 5713 | 250 | 4782 | CALCULATED |
| Tubing | 2 | 5525 | Name - Type - Depth of Tubing Packer Baker Tension PKR at 5523.33 | | |
| PB Total Depth | Geologic Name - Inj. Zone | | Depth - Top of Inj. Interval | | Depth - Base of Inj. Interval |
| 5670 | Desert Creek | | 5554 | | 5624 |

(To be filed within 30 days after drilling is completed)

14-20-603- 370

DEPARTMENT OF NATURAL RESOURCES AND ENERGY

LEASE NO.

API NO. 43-037- 16409

640 Acres
N

DIVISION OF OIL, GAS, AND MINING
Room 4241 State Office Building
Salt Lake City, Utah 84114

COUNTY San Juan SEC. 14 TWP. 41S RGE. 24E

COMPANY OPERATING Phillips Petroleum Company

OFFICE ADDRESS P.O. Box 2920

TOWN Casper STATE WY ZIP 82602

FARM NAME --- WELL NO. E14W23

DRILLING STARTED 12.22.60 DRILLING FINISHED 19

DATE OF FIRST PRODUCTION 3.1.61 COMPLETED 2.1.61

WELL LOCATED NE 1/4 SW 1/4

2054 FT. FROM SE OF 1/4 SEC. & 2020 FT. FROM NW OF 1/4 SEC.

ELEVATION ERRICK FLOOR 4705 GROUND 4697

RKB

TYPE COMPLETION

Single Zone ---

Multiple Zone X

Comingled ---

LOCATION EXCEPTION

OIL OR GAS ZONES

| Name | From | To | Name | From | To |
|----------------|------|------|------|------|----|
| Desert Creek I | 5554 | 5566 | | | |
| | | | | | |
| | | | | | |
| | | | | | |

CASING & CEMENT

| Casing Set | | | | Csg. Test | Cement | | |
|------------|------|-------|------|-----------|--------|--------|---------|
| Size | Wgt. | Grade | Feet | Psi | Sax | Fillup | Top |
| 9 5/8 | 25.4 | H-40 | 40 | No test | 60 | | Surface |
| | 32.3 | H-40 | 40 | | | | |
| 7 | 23 | J-55 | 1490 | 800 | 600 | | Surface |
| 4 1/2 | 9.50 | J-55 | 5735 | 1800 | 250 | 953 | 4782 |

PBTD 5670

TOTAL DEPTH 5713

PACKERS SET
DEPTH Baker Tension PKR at 5525.33

NOTE: THIS FORM MUST ALSO BE ATTACHED WHEN FILING PLUGGING FORM DOGM-UIC-6

COMPLETION & TEST DATA BY PRODUCING FORMATION

| | | | |
|---|--|--|--|
| FORMATION | Desert Creek I+II | | |
| SPACING & SPACING ORDER NO. | 40 acre Cause #C-3(B) | | |
| CLASSIFICATION (DISPOSAL WELL, ENHANCED RECOVERY, LP GAS STORAGE) | Enhanced Recovery | | |
| PERFORATED | 5554-66 5618-24 | | |
| INTERVALS | | | |
| ACIDIZED? | 12.19.66 5000 gal 28% regular acid | | |
| FRACTURE TREATED? | No | | |

INITIAL TEST DATA

Converted to Injector 5.6.64

| | | | |
|----------------------------|---------|----|----|
| Date | 5.6.64 | | |
| Oil, bbl./day | -- | | |
| Oil Gravity | -- | | |
| Gas, Cu. Ft./day | -- | CF | CF |
| Gas-Oil Ratio Cu. Ft./Bbl. | -- | | |
| Water-Bbl./day | 158 | | |
| Pumping or Flowing | Pumping | | |
| CHOKE SIZE | --- | | |
| FLOW TUBING PRESSURE | 2600 | | |

A record of the formations drilled through, and pertinent remarks are presented on the reverse.
(use reverse side)

I, the undersigned, being first duly sworn upon oath, state that this well record is true, correct and complete according to the records of this office and to the best of my knowledge and belief.

Telephone 307-237-3791

A.E. Stuart, Area Manager

Name and title of representative of company

Subscribed and sworn before me this SEP 22 1983 day of SEP 22 1983

Casper

WELL: E14W23
LOCATION: NESW Sec. 14 T41S-R24E
FIELD: GREATER ANGELO
RESERVOIR: Desert Creek I+II

DATE COMPLETION: 5.6.64
PRESENT STATUS: J.I.

RKB 4705'
GL 4697'

79'

SURFACE CASING: 9 5/8" 25.4#
H-40; 32.3# H-40; 40' ea.

INTERMEDIATE CASING: 7" 23#
J-55

PRODUCTION CASING: 4 1/2" 9.5#
J-55

1490'

PERFORATIONS: _____
5554-66
5618-24

PACKER: Baker Tension Pkr.
@ 5523.33'
Tubing: 2" @ 5525'

5523'
5525'

5554'-5624'

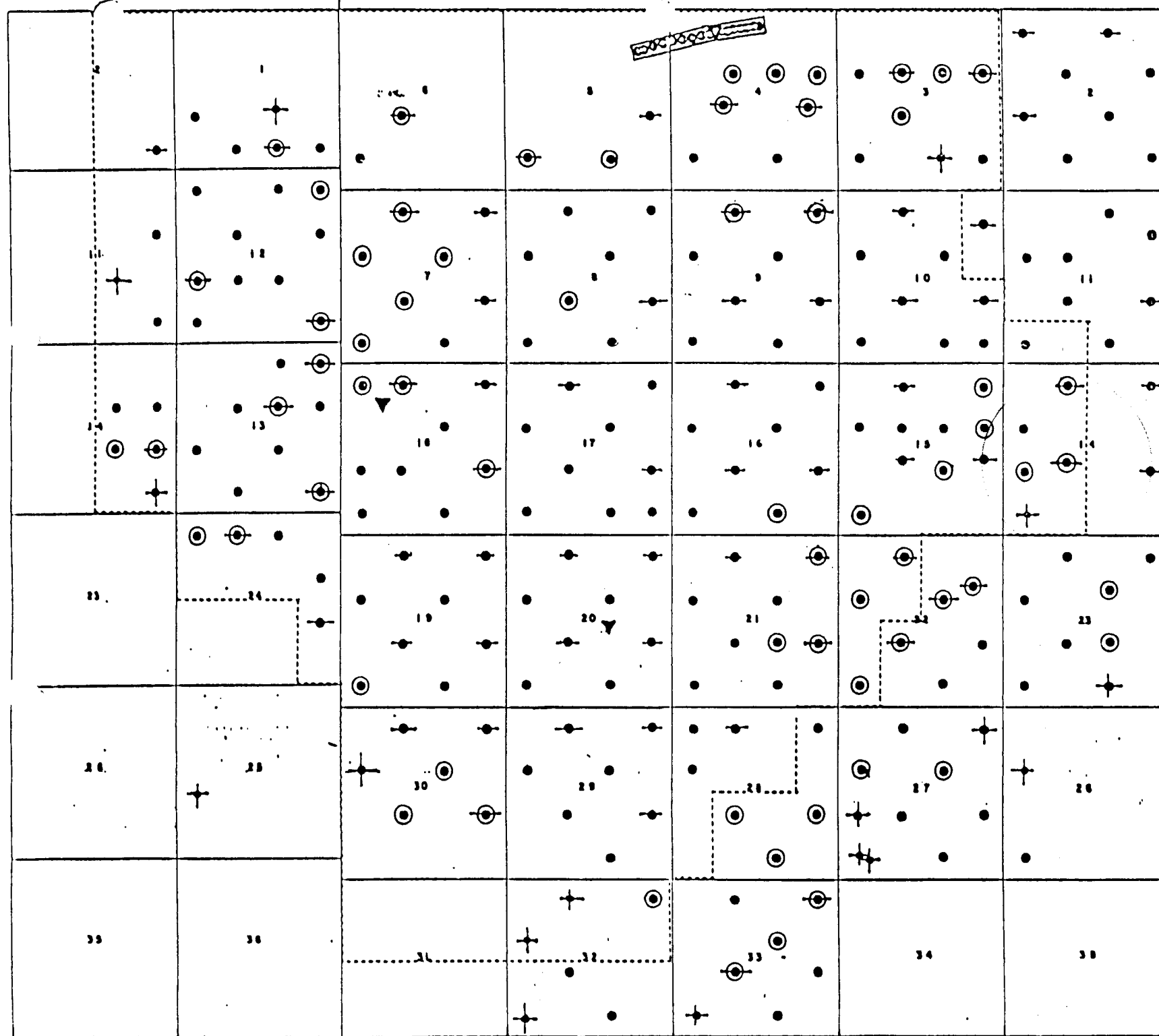
PBTD: 5670'
OTD: 5713'

5713'

Phillips Petroleum Company

R-23-E

R-24-E



RATHERFORD UNIT
 SAN JUAN COUNTY, UTAH
 2" = 1 mile
 ACT 3-83

- oil producer
- water injector
- ⊕ water supply
- ▽ domestic water
- ⊕ plugged & abandoned
- shut in well
- unit boundary

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

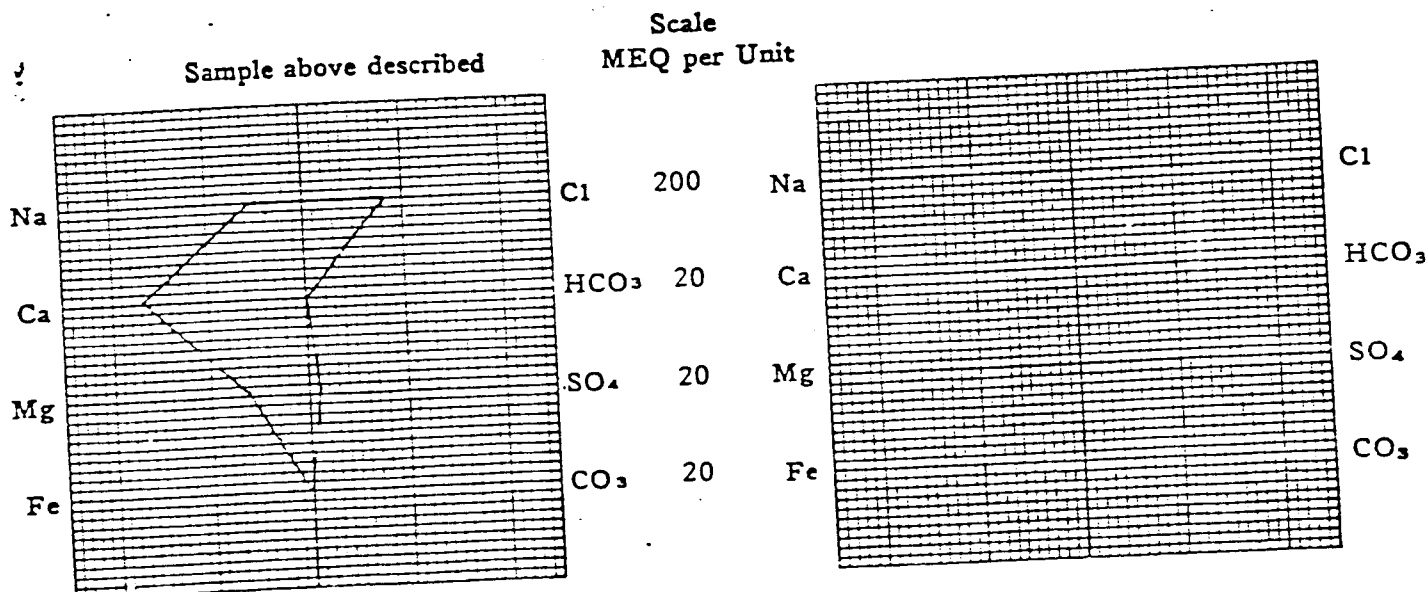
WATER ANALYSIS REPORT

OPERATOR Phillips Petroleum Company DATE 7-22-83 LAB NO. W30636
 WELL NO. Ratherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM Battery #1 Free water knockout
(7-5-83) @ 10:35
S/N 28568

REMARKS & CONCLUSIONS:

| Cations | mg/l | meq/l | Anions | mg/l | meq/l |
|------------------------------|-------|---------|------------------------------|-------|------------|
| Sodium | 30147 | 1311.38 | Sulfate | 1380 | 28.70 |
| Potassium | 429 | 10.98 | Chloride | 63000 | 1776.60 |
| Lithium | -- | -- | Carbonate | 0 | 0.00 |
| Calcium | 6865 | 342.56 | Bicarbonate | 151 | 2.48 |
| Magnesium | 1738 | 124.86 | Hydroxide | -- | -- |
| Iron | -- | -- | Hydrogen sulfide | -- | -- |
| Total Cations | | 1807.78 | Total Anions | | 1807.78 |
| Total dissolved solids, mg/l | | 103633 | Specific resistance @ 68°F.: | | |
| NaCl equivalent, mg/l | | 104549 | Observed | 0.087 | ohm-meters |
| Observed pH | | 7.3 | Calculated | 0.078 | ohm-meters |

WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

WTE INJECTION WELL

CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR Phillips Petroleum Co. DATE 5-27-83 LAB NO. W30480
 WELL NO. Rutherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM _____

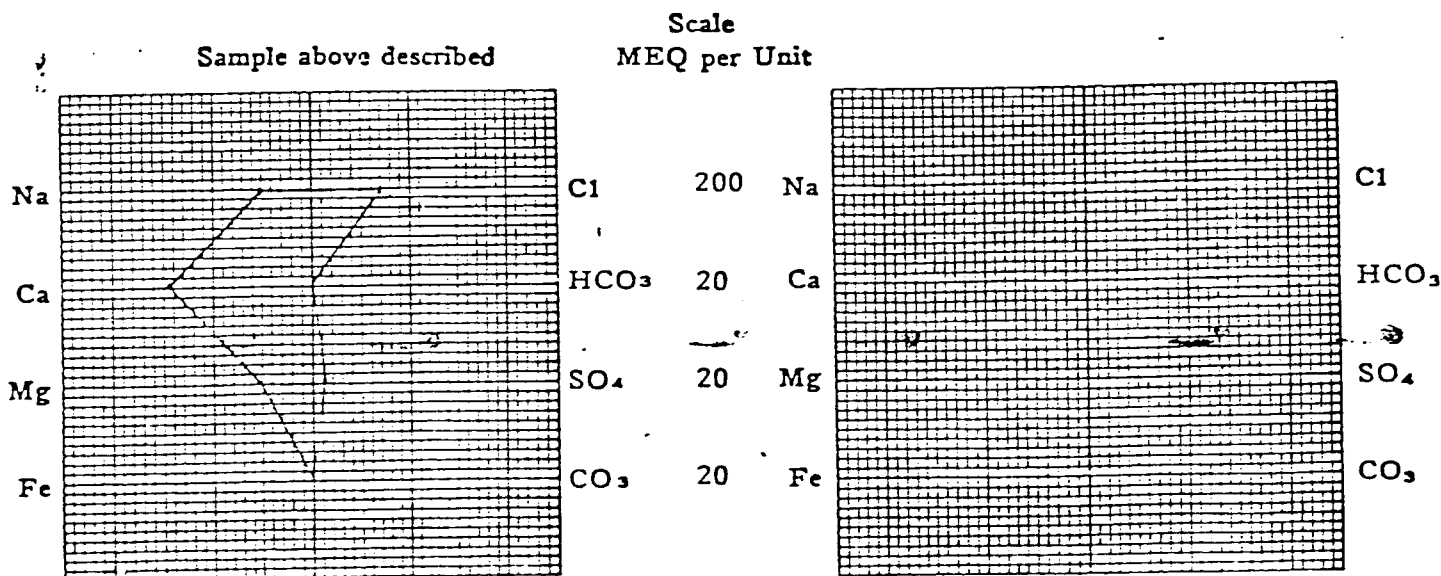
REMARKS & CONCLUSIONS: Specific gravity @68°F ----- 1.0646
 Oil and grease, mg/l ----- 2.5
 Aluminum (Al), mg/l ----- 0.90
 Iron (Fe), mg/l ----- 0.3
 Total Sulfides, mg/l ----- ND(0.1)

| Cations | | | Anions | | |
|---------------|-------|---------|------------------|-------|---------|
| | mg/l | meq/l | | mg/l | meq/l |
| Sodium | 24574 | 1068.99 | Sulfate | 1190 | 24.75 |
| Potassium | 396 | 10.14 | Chloride | 52000 | 1466.40 |
| Lithium | - | - | Carbonate | 0 | 0.00 |
| Calcium | 5982 | 298.50 | Bicarbonate | 190 | 3.12 |
| Magnesium | 1419 | 116.64 | Hydroxide | - | - |
| Iron | - | - | Hydrogen sulfide | - | - |
| Total Cations | | 1494.27 | Total Anions | | 1494.27 |

Total dissolved solids, mg/l ----- 85655
 NaCl equivalent, mg/l ----- 86344
 Observed pH ----- 7.4

Specific resistance @ 68°F.:
 Observed ----- 0.095 ohm-meters
 Calculated ----- 0.086 ohm-meters

WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)

NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter

Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--|--|--|---|--|--|--|--|--|--|--|--|--|-----------------------|--|---|--|---|--|----------------------------------|--|-------------------|--|
| 1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER Water Injection Well | | 2. NAME OF OPERATOR Phillips Petroleum Company | | 3. ADDRESS OF OPERATOR P. O. Box 2920, Casper, WY 82602 | | 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 2054' FSL, 2020' FWL (NE/SW) | | 5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-370 | | 6. IF NECESSARY, ALLOTED OR TRADE NAME Navajo | | 7. WELL IDENTIFICATION NAME SW-I-4192 | | 8. NAME OF LEASE NAME Ratherford Unit | | 9. WELL NO. E14W23 | | 10. FIELD AND POOL, OR WILDCAT Greater Aneth | | 11. SEC., T., R., OR NE. OR S.E. AND CROSS-SECTION Sec. 14-41S-R24E, SLBM | | 12. COUNTY OR PARISH San Juan | | 13. STATE Utah | |
| 14. PERMIT NO. 43-037-16409 | | | | 15. ELEVATIONS (Show whether SF, ST, or, etc.) KB: 4705', GL: 4695' | | | | | | | | | | | | | | | | | | | | | |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|-------------------------|--------------------------|----------------------|-------------------------------------|---|--------------------------|-----------------|--------------------------|
| TEST WATER SHUT-OFF | <input type="checkbox"/> | PULL OR ALTER CASING | <input type="checkbox"/> | WATER SHUT-OFF | <input type="checkbox"/> | REPAIRING WELL | <input type="checkbox"/> |
| FRACTURE TREAT | <input type="checkbox"/> | MULTIPLE COMPLETS | <input type="checkbox"/> | FRACTURE TREATMENT | <input type="checkbox"/> | ALTERING CASING | <input type="checkbox"/> |
| SHOOT OR ACIDIZE | <input type="checkbox"/> | ABANDON* | <input checked="" type="checkbox"/> | SHOOTING OR ACIDIZING | <input type="checkbox"/> | ABANDONMENT* | <input type="checkbox"/> |
| REPAIR WELL | <input type="checkbox"/> | CHANGE PLANS | <input type="checkbox"/> | (Other) | | | |
| (Other) | | | | (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) | | | |

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

See attachment for Well Data, Justification and Proposed Operation.

A 10' x 8' x 6' fenced pit will be constructed on location in a previously disturbed area. Upon completion of the workover, the pit will be dried and recovered.

5-BLM, Farmington, NM
2-Utah O&G CC, Salt Lake City, Utah
1- P. J. Adamson
1- B. Conner, 318 B-TRW
1- J. R. Weichbrodt
1- C. M. Anderson
1- File RC

18. I hereby certify that the foregoing is true and correct

| | | |
|--|---------------------------|-----------------------------|
| SIGNED <u>D. C. Gill</u> | TITLE <u>Area Manager</u> | DATE <u>August 26, 1985</u> |
| (This space for Federal or State office use) | | |
| APPROVED BY <u>Alvin B. Feight</u> | TITLE <u>VIC Manager</u> | DATE <u>9-4-85</u> |
| CONDITIONS OF APPROVAL, IF ANY: | | |

*See Instructions on Reverse Side

RATHERFORD UNIT WELL E14W23

Item 17

WELL DATA:

9-5/8" 25.4# + 32.3# csg @ 79' w/60 sx cmt.
7" 23# csg @ 1490' w/600 sx cmt.
4-1/2" 9.5# csg @ 5713' w/250 sx cmt.

Perfs @ 5554'-5566', 5618'-5624'

Formation Tops: Dechelly @ 2590'
Hermosa @ 4100'
Desert Creek @ 5545'

RECEIVED

TD: 5713'

SEP 03 1985

DIVISION OF OIL
GAS & MINING

JUSTIFICATION:

The well does not have economical use as an injection well and has no recompletion or stimulation potential.

PROPOSED OPERATION:

- 1) Sqz perfs w/50 sx cmt. TOC @ 5450'.
- 2) Spot 25 sx cmt in 4-1/2" csg from 3950' to 4250' across Hermosa.
- 3) Perf 4-1/2" csg @ 2800'.
- 4) Pump 75 sx cmt to provide 300' balanced plug in annulus and 4-1/2" csg from 2800' to 2500' to isolate the Dechelly Fm.
- 5) Perf 4-1/2" csg @ 1550'.
- 6) Pump 40 sx cmt to provide 150' balanced plug in annulus and in 4-1/2" csg from 1550' to 1400' to provide a plug across 7" surf csg shoe.
- 7) Pump 25 sx cmt plug in annulus and 4-1/2" csg to provide 100' plug to surface.
- 8) Install P&A marker, unless surface owner requests otherwise, and rehab surface.
- 9) Will use mud-laden fluid between all cmt plugs.

28

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Phillips Well No. Rotterdam Unit E 14W23
 County: San Juan T 413 R 24E Sec. 14 API# 43-037-16409
 New Well ☐ Conversion ☐ Disposal Well ☐ Enhanced Recovery Well ☒

| | YES | NO |
|--|-------------------------------------|--------------------------|
| UIC Forms Completed | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Plat including Surface Owners, Leaseholders, and wells of available record | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Schematic Diagram | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Fracture Information | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Pressure and Rate Control | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Adequate Geologic Information | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Fluid Source | <u>Desert Creek</u> | |

| | | | |
|--|---|-----------------------------|-------------------|
| Analysis of Injection Fluid | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | TDS <u>85655</u> |
| Analysis of Water in Formation to be injected into | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | TDS <u>103633</u> |

| | | |
|-----------------------------------|----------------|-----------------------------|
| Known USDW in area | <u>Nogate</u> | Depth <u>1550</u> |
| Number of wells in area of review | <u>6</u> | Prod. <u>2</u> P&A <u>1</u> |
| | Water <u>0</u> | Inj. <u>3</u> |

| | | |
|-------------------|------------------------------|--|
| Aquifer Exemption | Yes <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
|-------------------|------------------------------|--|

| | | |
|---------------------------|------------------------------|--|
| Mechanical Integrity Test | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
|---------------------------|------------------------------|--|

| | | | |
|------|--|------|--|
| Date | | Type | |
|------|--|------|--|

Comments: TOC 4782

Reviewed by: AB

UTAH DIVISION OF OIL, GAS AND MINING
CASING-BRADENHEAD TEST

OPERATOR: Phillips Petroleum
FIELD: Greater Aneth LEASE: Ratherford
WELL # E 14W23 SEC. 14 TOWNSHIP 41S RANGE 24E
STATE FED. FEE DEPTH _____ TYPE WELL INJW MAX. INJ. PRESS. _____
SI 12-26-80
TEST DATE 6/17/86

| CASING STRING | SIZE | SET AT | CMT | PRESSURE READINGS | REMARKS | FUTURE |
|---------------------|--------------|-------------|-----------------------------|-------------------|-----------|--------|
| <u>SURFACE</u> | <u>9 5/8</u> | <u>79</u> | <u>60</u> | | <u>SE</u> | |
| <u>INTERMEDIATE</u> | <u>7</u> | <u>1490</u> | <u>600</u> | | | |
| <u>PRODUCTION</u> | <u>4 1/2</u> | <u>5713</u> | <u>250</u> | | | |
| <u>TUBING</u> | <u>2</u> | <u>5525</u> | <u>Baker Parker Model A</u> | | | |

| CASING STRING | SIZE | SET AT | CMT | PRESSURE READINGS | REMARKS | FUTURE |
|---------------------|------|--------|-----|-------------------|---------|--------|
| <u>SURFACE</u> | | | | | | |
| <u>INTERMEDIATE</u> | | | | | | |
| <u>PRODUCTION</u> | | | | | | |
| <u>TUBING</u> | | | | | | |

| CASING STRING | SIZE | SET AT | CMT | PRESSURE READINGS | REMARKS | FUTURE |
|---------------------|------|--------|-----|-------------------|---------|--------|
| <u>SURFACE</u> | | | | | | |
| <u>INTERMEDIATE</u> | | | | | | |
| <u>PRODUCTION</u> | | | | | | |
| <u>TUBING</u> | | | | | | |

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Expires August 31, 1985

8. LEASE DESIGNATION AND SERIAL NO.
14-20-603-370

9. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT ASSIGNMENT NAME
SW-I-4192

8. FARM OR LEASE NAME

Ratherford Unit

9. WELL NO.

E-14W23

10. FIELD AND POOL, OR WILDCAT
Greater Aneth

11. SEC., T., R., N., OR S.E. AND
SURVEY OR AREA

Sec. 14-41S-24E, SLBM

14. PERMIT NO.

43-037-16409

15. ELEVATIONS (Show whether SF, ST, OR, etc.)

KB: 4705', GL: 4695'

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANE

X

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Due to current economic conditions, approval is requested to keep well shut in until conditions improve.

RECEIVED
OCT 10 1986

DIVISION OF
OIL, GAS & MINING

5-BLM, Farmington, NM

2-Utah O&G CC, Salt Lake City, Utah

1-P. J. Adamson

1-M. Williamson, 302 TRW

1-J. R. Reno

3-1-B. J. Murphy

1-File RC

18. I hereby certify that the foregoing is true and correct

SIGNED

D. C. Gill

TITLE Area Manager

DATE 10-13-86

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

ACCEPTED BY THE STATE

OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 10-17-86

BY: John R. Boye

Federal approval of this action
is required before commencing
operations.

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL
(Other instructions
verse side)

VE
re

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. ☐ OIL WELL ☐ GAS WELL ☐ OTHER Water Injection Well

2. NAME OF OPERATOR
Phillips Petroleum Company

3. ADDRESS OF OPERATOR
P. O. Box 2920, Casper WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
2054' FSL, 2020' FWL (NE/SW)

14. PERMIT NO.
43-037-16409

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB: 4705', GL: 4695'

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-370

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo 123106

7. UNIT AGREEMENT NAME
SW-I-4192

8. FARM OR LEASE NAME
Ratherford Unit

9. WELL NO.
#E14W23

10. FIELD AND POOL, OR WILDCAT
Greater Aneth

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA
Sec. 14-T41S-R24E, SLBM

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|---|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/> | MULTIPLE COMPLETE <input type="checkbox"/> | FRACTURE TREATMENT <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | ABANDON* <input type="checkbox"/> | SHOOTING OR ACIDIZING <input type="checkbox"/> | ABANDONMENT* <input checked="" type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | (Other) <input type="checkbox"/> | |
| (Other) <input type="checkbox"/> | | (NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) | |

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Well was plugged December 1, 1987. See attached for Well Data and Summary of Completed Operations.

5-BLM, Farmington, NM
2-Utah O & G CC, Salt Lake City, UT
1-P. J. Konkell
1-J. R. Reno
1-File - RC
1-M. Williams 1370 G POB

18. I hereby certify that the foregoing is true and correct

SIGNED D. C. Gill TITLE Area Manager DATE December 7, 1987

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 12-21-87
BY: [Signature]

*See Instructions on Reverse Side

Ratherford Unit E14W23

Item 17

Well Data:

RKB: 4705' GL: 4695'

9-5/8", 25# casing @ 79' w/ 60 sx cement
7 ", 23# casing @ 1490' w/ 600 sx cement
4-1/2", 9.5# casing @ 5713' w/ est. top of cement @ 2580'
No casing was recovered.

Perfs @ 5554-5566', 5618-5624'

Formation tops: Hermosa @ 4525'
 Desert Creek @ 5545'

PBTD: 5670'

Completed Operations:

1. Tried to release packer, POOH w/ tubing, tubing/packer safety joint had unscrewed. Did not recover packer.
2. RIH w/ bit and scraper, tag packer and pushed packer downhole 6' to 5527'.
3. RIH w/ cement retainer and set at 5459'.
4. Pressure tested surface lines to 3500 psi, pressure tested casing annulus to 500 psi.
5. Established injection rate of 3 BPM at 2000 psi with 10 bbl water through cement retainer.
6. Mixed and pumped 50 sx Class B cement to spot cement plug across Desert Creek perfs from 5459' to 5624'. Left 5 sx cement on top of retainer. Final squeeze pressure was 3000 psi at 1/4 BPM.
7. Stung out of retainer to spot 5 sx cement, changed out hole to 9.6 ppg mud.
8. POOH w/ stinger, RIH w/ tubing open-ended to 4631'.
9. Mixed and pumped 25 sx cement to spot balanced plug from 4631' to 4170' across Hermosa formation.
10. RIH w/ perforating gun, tag Hermosa plug at 4170'.
11. Raised gun to 1550', shot 5 shots/ft, 1 foot.
12. POOH w/ gun. Established circulation down 4-1/2" casing and up 4-1/2"-7" annulus.
13. Circulated 280 sx cement to set balanced plug from 1550' to surface.
14. Cut 4-1/2 and 7" casings off 4' below GL. Welded 3/8" plate on 7" casing and installed inscribed permanent monument.
15. Filled pit and cleaned up location.

DOWNHOLE SCHEMATIC

WELL: E14W23

RKB: 4705'

GL: 4695'

CURRENT

COMPLETED

CONDUCTOR

9 5/8" 25.4-32.3

79' 60 SX

SURFACE CSG

7" 23 #

1490' 600 SX

ETOC

2580'

BANKED AD PKR @ 5521'

PERFS 5554-5566'

5618-5624'

POTD

5670'

PROD. CSG.

4 1/2" 9.5 #

5713' 250 SX

280 SX CMT

1550' TO SURFACE

25 SX CMT

4170' - 4630'

50 SX CMT

DESERT CRK PERFS

5459' - 5624'

